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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,439

08/06/2009

Stephan Clasen

BAW-0021

5948

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Hartford, CT 06103

EXAMINER

PATEL, YOGESH P

ART UNIT

PAPER NUMBER

3776

NOTIFICATION DATE

DELIVERY MODE

03/29/2012

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

## Office Action Summary

Application No.

10/585,439

Applicant(s)

CLASEN ET AL.

Examiner

YOGESH PATEL

Art Unit

3776

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 1-15 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-15 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 21 December 2011 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/21/2011</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

The amendment to specification filed on 12/21/2011 is entered and objected to because Fig. 3 is not a cross-section view of the suction apparatus illustrated in figures 1 and 2. Figure 1 simple shows hollow base body 12 and figure 2 shows the hollow base body having a border 22. The figure 3 appears to be a new figure showing new elements not previously presented in figures 1 and 2.

### ***Drawings***

The drawings were received on 12/21/2011. These drawings are entered and objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, outer surface of the base body having mirroring surface (claims 3, 11), a pluggable element (claim 12), and spherical joint (claim 8) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 2 and 11 are objected to because of the following informalities: the claims recite "the inner surface has a mirrored surface that is viewable through the suction port" which is redundant to lines 5-7 of claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "the inner surface" in line 5. There is insufficient antecedent basis for this limitation in the claim. The applicant has defined an inner surface of the hollow body and not of the suction port. Further, it is not clear how a suction port can have an inner surface.

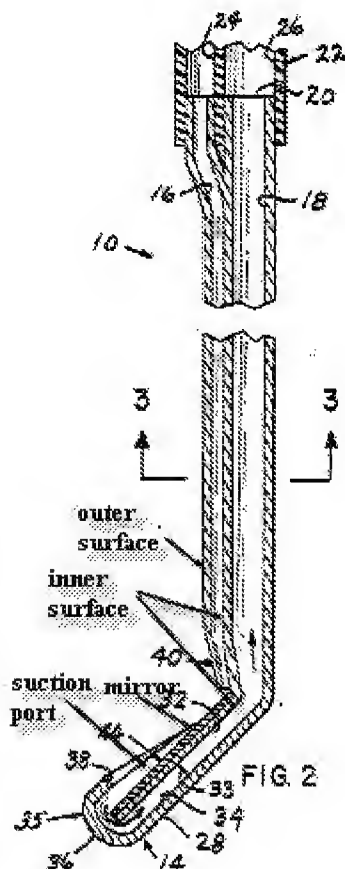
***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Warriner (3,092,910).



Warriner discloses a dental suction apparatus (figures 1-5) having a hollow base body (e.g. 10) with a longitudinal axis X-X that comprises an outer surface (shown above), an inner surface (shown above) and a suction port (shown above), wherein a mirrored surface (shown above) is disposed in the region on the inner surface of the body. Please note that no suction or vacuum pump is attached to dental suction apparatus of claim 1 to perform any suctioning function.

With regard the statement of intended use and other functional statements (e.g. “so that at least parts of the mouth cavity can be viewed through the suction port”), they do not impose any structural limitations on the claims distinguishable over the prior art which is capable of being used as claimed if one so desires to do so. The mouth cavity can be viewable through the suction port since the mirror is exposed in an orientation similar to the instant application. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Regarding claim 2, the inner surface has the mirrored surface (e.g. 44) that is viewable through the suction port, the suction port being configured to be at an incline (figure 2; col. 2, lines 21-23) with respect to the longitudinal axis X-X that the area of the suction port exceeds a cross-sectional area of the base body extending across the longitudinal axis.

Regarding claim 4, the mirror surface is disposed on a pluggable element (e.g. ring 54) that is releasably connected to the suction apparatus (col. 2, lines 60-65).

Regarding claim 5 a groove (e.g. recess 52) for insertion of the pluggable element is disposed in the region of the suction port (col. 2, lines 60-65).

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Brossoit (5,230,622).

Brossoit discloses a dental suction apparatus 10 (figures 1-2) including a hollow base body 14, 15 with a longitudinal axis 21 having an outer surface and inner surface and a suction port 16, the tube 15 is made of plastic (col. 2, line 43), thus it is deformable. The plastic material is deformable when sufficient force (e.g. mechanical, thermal) applied to it.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warriner as applied to claim 1 above, and further in view of Dragan et al. (5,876,384).

Warriner discloses the invention substantially as claimed except for the base body is deformable and is made from flexible plastic material as claimed; however, Dragan teaches an aspirator tube 15 made from flexible plastic (col. 2, lines 13-14). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Warriner's apparatus by providing the body being made

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from flexible plastic as claimed as taught by Dragan so that the tube can be flex to reach various areas of the mouth for removing debris, saliva, fluids during dental treatment.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warriner as applied to claim 1 above, and further in view of Savin et al. (2002/0058230).

Warriner discloses the invention substantially as claimed except for the light source disposed in the region of the suction port as claimed; however, Savin teaches a dental mirror device (figure 1A, 1B) having a light source 18 to illuminate patient's mouth. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Warriner's apparatus by providing the light as claimed as taught by Savin in order to illuminate patient's mouth for dental inspection.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warriner in view of Brossoit as applied to claim 11 above, and further in view of Savin et al. (2002/0058230).

Warriner/Brossoit discloses the invention substantially as claimed except for the light source disposed in the region of the suction port as claimed; however, Savin teaches a dental mirror device (figure 1A, 1B) having a light source 18 to illuminate patient's mouth. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of Warriner/Brossoit by providing the light as claimed as taught by Savin in order to illuminate patient's mouth for dental inspection.



Claims 1, 2, 3, 6, 8, 11, 12 and 14 are additionally rejected under 35 U.S.C. 103(a) as being unpatentable over Brossoit in view of Loertscher (4,963,142).

Brossoit discloses a dental suction apparatus 10 (figures 1-2) including a hollow base body 14, 15 with a longitudinal axis 21 having an outer surface and inner surface and a suction port 16 and the outer surface of the hollow body having a mirrored surface 11 on a pluggable element 27 that is releasably connected; the tube 14, 15 is made of plastic (col. 2, line 43), thus it is deformable due to its material properties; the suction port is inclined with respect to longitudinal axis thus having larger cross section than the body. Brossoit further teaches that spherical joint (e.g. ball/socket joint 36, 40, figure 2) on grippable element which allows greater degree of freedom as seen in the figure. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Warriner by adding such joint on the base body to allow the suction tube with a greater degree of freedom for thoroughly inspecting patient's mouth.

Brossoit fails to disclose the inner surface having mirrored surface as claimed.

Loertscher teaches a probe 78 (figures 6, 6A) for laser and aspiration (col. 2, lines 17-19; col. 1, line 66-col. 2, line 2) having reflective coating 84 on its inner surface and outer surface (figure 6A). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Brossoit by providing the reflective coating on inner surface and outer surface of the suction probe as taught by Loertscher so that laser can be guided through the suction apparatus for treating periodontal disease and suctioning of waste fluids using the same device.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brossoit in view of Loertscher as applied to claim 12 above, and further in view of Kanas (5,232,362).

Brossoit/Loertscher discloses the invention substantially as claimed except for the tube having a groove for the pluggable element; however, Kanas teaches a suction tube 24 having a groove 58 for a pluggable element (e.g. tongue retractor 12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Brossoit/Loertscher by providing a groove as claimed as taught by Kanas in order to prevent the pluggable element from moving along the suction tube.

### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection. Applicant argued that Brossoit device is not deformable in the longitudinal direction. The examiner disagrees because plastics are deformable material if sufficient force (e.g. mechanical, thermal) is applied to it, thus satisfy the claim limitation. Further, the examiner agrees with the applicant regarding amended claim 1; however, it is now rejected in view of Loertscher. Loertscher teaches the inner surface having reflective surface for laser application. Although, it serves different purpose than the applicant's, it is capable of performing as intended by the applicant because Brossoit has a exposed suction port similar to the applicants. Further, Dragan clearly mentions that flexible tube

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is made from readily bendable material that can be easily bent by the operator to any desired angle (abstract).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Patel Yogesh whose telephone number is (571)270-3646. The examiner can normally be reached between 9 AM – 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, ***please contact the examiner's supervisor, SPE Todd Manahan, at (571) 272-4713***. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

***If there are any inquiries that are not being addressed by first contacting the Examiner or the Supervisor, you may send an email inquiry to TC3700\_Workgroup\_D\_Inquiries@uspto.gov.***

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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